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DOCKET 2008-196-E

RESPONSE BY DR. RONALD P. WILDER TO REBUTTAL TESTIMONY BY
STEPHEN A. BYRNE REGARDING MY DIRECT TESTIMONY

COPY

Posted: led

Dept: S.A. + all Parties

Date: 11/12/08

Time: 4:50

Q HAVE YOU READ MR. BYRNE'S REBUTTAL TESTIMONY?

A Yes, I have.

Q WHAT ARE THE ESSENTIAL ARGUMENTS IN HIS REBUTTAL? HOW
DO YOU RESPOND TO HIS ARGUMENTS?

A First, the question asked to Mr. Byrne in his rebuttal testimony (at page 9) asserts that I claim that SCE&G will be "starting over in the learning curve as far as nuclear operations". I did not make such a broad statement in my direct testimony. My comments are directed at the new technology Westinghouse AP1000 reactor design, not at SCE&G nuclear operations currently in place. I believe that, while there may be important experience transfers from operating the existing V.C. Summer station reactor to the proposed new technology reactors, learning curve issues still apply to the new reactor design. Being near the top of the list of utilities building the new reactor design increases the cost uncertainty in construction and operation. Cost advantages will accrue to those utilities that construct and operate the AP1000 reactor at a stage with further experience and learning than will be available to those utilities building and operating the reactors near the beginning of the development process.

Second, Mr. Byrne states that "SCE&G has chosen AP1000 units precisely because they will allow the most seamless transfer of its existing learning curve advantages to the operation of the new units". I understand this position, but I believe

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that it does not undermine my argument that there will likely be important learning curve advantages to later adopters of the new technology.

Q DO YOU HAVE OTHER POINTS TO MAKE IN RESPONSE TO MR. BYRNES' REBUTTAL TESTIMONY?

A I would like to point out that Mr. Byrne includes an extensive discussion of risk in his direct testimony, as summarized in Byrne Exhibit J. That Exhibit, titled "Risk Factors Related to the Construction and Operation of the Facility", lists such risk factors as licensing risk, regulatory risk, engineering and design risk, all of which could delay and increase the cost of construction. Under construction risk, Mr. Byrne points out that: "Accordingly, problems may arise during construction that are not anticipated at this time." (Exhibit J, p. 8). Under the category of operational risk, Mr. Byrne points out that "Adding two new AP1000 units to the site will require significant expansion of SCE&G's existing staff and capabilities. Recruiting, training and retaining the required staff is one of the risks related to operation of the plant, but it is a risk SCE&G believes that can be managed without undue difficulty." This statement also supports my belief that learning curve effects will be important in the operation of the 2 new reactors.

Q WHAT IS YOUR CONCLUSION REGARDING LEARNING CURVE EFFECTS ON THE PROPOSED AP1000 REACTORS?

SCE&G proposes to build and operate these new technology reactors that would be among the first several AP1000 reactors to be built and operated in the United States. Further, if the Commission acts favorably on this proposal, construction would begin before any AP1000 reactor has been completed anywhere. Mr. Byrne states that construction and operating experience from previous reactors will be transferrable to the

AP1000 reactor, but in his direct testimony refers to the risks in licensing, construction and operation of the AP1000. I urge the Commission to consider the learning curve disadvantage of SCE&G's proposal. Consumers, through higher prices, would shoulder much of the risk in adopting this new technology. There are less risky alternatives, such as increased conservation incentives, along with postponing the decision to proceed with the new AP1000 technology until others have reached greater experience with it.

DeSanty, Tricia

From: Ron Wilder [ronwilder@mindspring.com]
Sent: Wednesday, November 12, 2008 11:39 AM
To: DeSanty, Tricia
Subject: Response to Rebuttal for Docket 2008-196-E
Attachments: RESPONSE to Byrne Rebuttal.doc

Intervenor Ruth Thomas asked that I send my response to rebuttal to you. It is attached to this email. Ruth Thomas will mail copies to those parties that do not have email addresses.

Thank you, Ronald P. Wilder

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